

Edner

this country will recognize in Labanotation a most useful and necessary means for gathering complete records of singing and dancing peoples. The interest of such people would make possible the preparation of a pamphlet outlining a survey course in Labanotation specifically suitable for this type of research and geared to an immediate practical application of this knowledge.

Labanotation is much in evidence among dance and music research students on the international scene. To ignore it would indeed mark us as being "behind the times"; to accept, foster and use this practical tool would result in presenting to the body of world culture untold richness in recorded dance in our own country and elsewhere.

Nadia Chilkovsky.

L A M G N o 1 3 4

A SCIENTIFIC APPROACH TO THE STUDY OF MOVEMENT

Movement is, for the average person, an instinctive part of his activity and apparently without recognisable form or quality. Hence it seems to defy any formal analysis or even descriptive classification. I think it is for such reasons that, until Laban's studies, no attempt at a systematic study of human movement had apparently ever been made.

The scientific approach to such subjects has always, I think, started with careful observation and description. On the basis of this are recognised characteristic forms and qualities, which show certain relationships to each other. At such a stage a formal analysis can be introduced, which describes in abstract terms these relationships and may discover new ones. These then have to be translated back into the reality of the subject, and investigated to discover their meaning. Observation is followed by theory, whose predictions have to be verified, leading to further development of the theory. This process can be well followed in the biological sciences. Here we start with the classifications of Linnaeus and eventually arrive at the modern theories of evolution and inheritance with their complicated mathematical justifications and predictions. In this light I consider Laban's work as laying the foundations of such a scientific study of human movement.

It is the process of formal analysis, its applications and uses, which is of particular interest to me. A purely mathematical analysis cannot usually supply of its own accord any fundamentally new concepts. For example, an abstract study of the combinations of weight, space and time, which give the efforts, could not of itself lead to the concept of flow in human movement. However, if we assign abstract symbols to the basic qualities flow, space, weight and time, we can study the relationships between these symbols and their combinations, which in their turn correspond to real movement concepts such as, for example, the inner attitudes. Many of these combinations have, of course, been discerned without recourse to any such symbolism. However, as the

system gets more complex, it becomes increasingly necessary to formalise in order to obtain an overall and clear picture of its structure. Combinations, previously overlooked, may be discovered and turn out to have an important meaning. Certainly I feel sure I have been able to grasp the concepts formed out of the basic space, weight, time and flow qualities more easily in terms of such formalism, and perhaps this approach would help other more scientifically-minded people. It may be argued that such an approach has little to add to the artistic side of movement, and with this I am inclined to agree. I have done certain analytic studies of the possible combinations of musical notes or chords, and it is not inconceivable that one could in this way sort out the exact forms of combinations which characterise any particular musical style. However, I do not think music could be composed in this way by any mathematician. The analytic qualities must be largely submerged in the subconscious of the composer, "artistic" or more emotional qualities being most prominent. In the same way, I feel that such studies can be of little more than academic value to dance, or movement as an art form.

Movement, though, in contrast to music, is not simply an art form. It is essential that we control our movements with maximum efficiency in carrying out our work. Further, the qualities of a person's movement are inextricably connected with his character, and it is well known that a more balanced control and appreciation of our movements may lead to greater psychological balance. Every task requires its own particular types of movements. For education in the uses of movement we must be able to record and analyse its qualities and impart the results of such analysis to other people. It is for this that formal analysis can be of great value.

In order to correlate movement qualities with other human characteristics it is essential to have some sort of measurable comparison or classification, and this is supplied by Laban's analysis of human movement. Take an example in my own field of study, genetics, or the mode of inheritance of a character and its effect. If we were to observe and classify the movements of groups of closely-related people we could, using the ordinary statistical techniques of genetics, obtain a measure of the inherited component in movement qualities. As these movement qualities can be closely related to character, but are well-defined and so easily recognisable, we may have here also a clue to the study of the inheritance of human character. This study, in human beings, has so far largely eluded any precise analysis. Suppose, for example, we make an assessment of the movements of two parents and find in one the qualities weight and space uppermost and in the other those of weight and time. We may expect to find, on an average, the weight quality prominent amongst the children, but how will the time and space qualities of the parents show in the children? Could one be dominant to the other, might they interact in some way with each other or will simply half the

children on an average have weight and space and the other half weight and time qualities predominant? These are the types of questions which could be answered by movement analysis of the children.

This is just one example of the way in which Laban's work makes it possible to subject human movement to scientific analysis.

Walter F. Bodmer.

MOVEMENT TRAINING IN EDUCATION

The Importance of Individual Movement Characteristics

With one year at the Art of Movement Studio just recently completed, one is tempted to look backward at the things which have been learned and forward to the dimensions of next year's job in an effort to foresee how the two will fit together.

It is surely the feeling of the newly-graduated that a tremendous lot was gained during the year of study and that the depth and breadth of the learning will be revealed in an ever-unfolding process on the job.

In the writer's case, it happens that next year will offer little or no opportunity to concentrate on dance. Yet the values of the past year will surely be evident in the field of general physical education.

During one of his lectures, Mr. Laban discussed the balance between freedom and discipline as it applies to the teaching of the dance. Much of what was said is beyond the scope of this article, but in this concept one can see significance for both classes in dance and classes in other aspects of physical education.

Perhaps the significance of this lecture became most apparent to the writer as a result of having observed classes in Lancashire and the West Riding and having discussed the principles with the organizers concerned. Some of these lessons were in dance, some in dance with a dramatic bias, and some in physical education; but, regardless of the particular area dealt with, it was evident that there was present a balance between freedom and discipline.

This was facilitated by the use of the movement principles—use of body parts, time, weight, space et cetera. The common denominator for all the activity was the challenge based upon movement principles. With such a challenge, the teacher was able to release the individual members of the class to invent or create movements which had significance for them personally. At the same time, the movement principles involved gave the pupil a framework within which to work; and the teacher a framework against which to assess the various responses.

This is very significant indeed. For some years now, it has been recognized that concern for individual differences must be one of the important educational precepts. However, in classes of thirty to forty pupils, the teacher has been faced with the necessity of dealing with the group. In many cases, the most that has been done has been to work at a level which accommodates the pupils of average ability—